



"AlphaCell is probably the most advanced TMM/FTMM suite for NVH simulations"

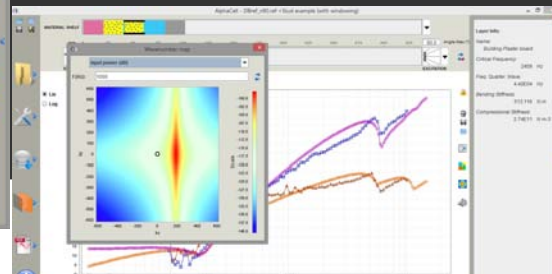
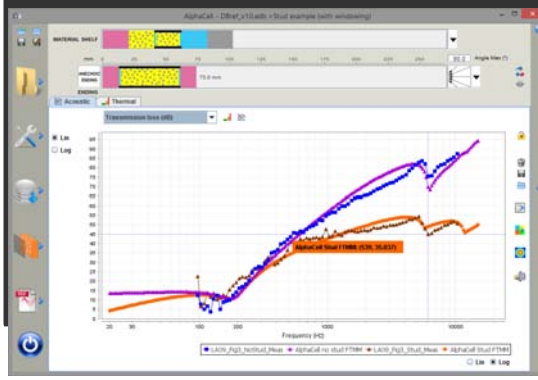


AlphaCell predicts the **vibro-acoustic** response of **multi-layer systems** to various sound excitations :

- **easy & fast** simulations
- broad application material **library**
- **complete set** of material models
- various **imports / exports**
- **reactive** and **skilled support**

Save your time and energy to focus on your **core activities** !

Prepare to be MATELYS approved !



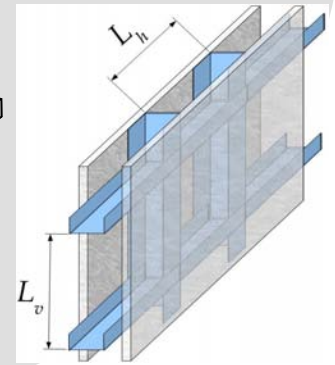
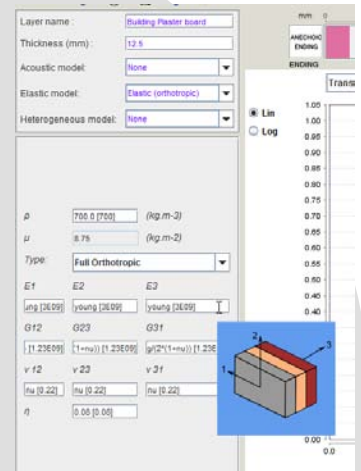
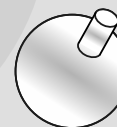
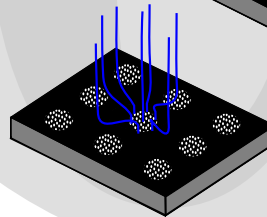
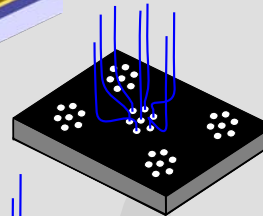
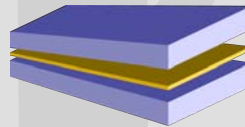
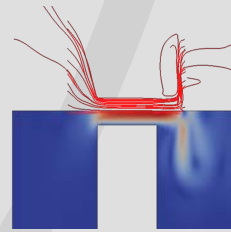
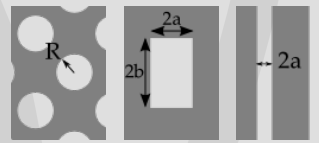
KEY FEATURES

- intuitive interface
- listening of solution efficiency
- thermal properties
- multiple studs in series
- generalised equivalent plate models
- compressed fibrous model
- corrugated & ribbed plates
- material library
- export of material cards (Actran, Nastran, OptiStruct)



MATERIAL MODELS

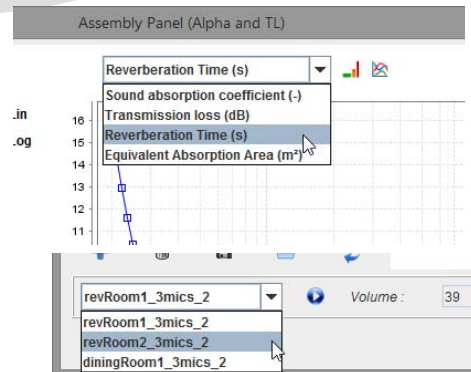
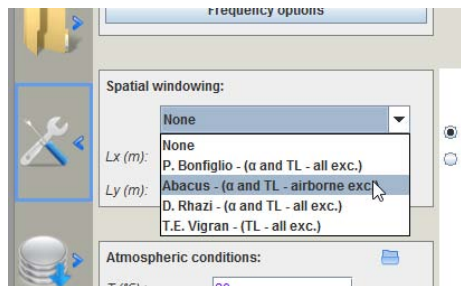
- ↳ porous materials
 - fibrous, foams, granulars, compressed, orthotropic
- ↳ perforated plates
 - circular, square, slit perf., woven/non-woven, high SPL
- ↳ solid materials
 - isotropic, visco-elastic, orthotropic
- ↳ orthotropic solid materials
 - 3D, thin plate, transverse isotropic
- ↳ equivalent plate models
 - condensed, corrugated, stiffened plates
- ↳ heterogeneous materials
 - elastic / solid / porous inclusions, resonators, studs



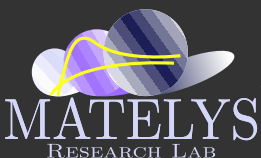
VIBRO-ACOUSTIC EXCITATIONS

- ↳ air borne sounds
 - plane waves, diffuse field, modal sound field
- ↳ structure borne excitations
 - point force, tapping machine, rain fall
- ↳ turbulent boundary layer

Global Indicators				
	Gen_ennn	Rw (C, Ctr)	C50-3150	Lnw
ud...	Ctr100-5000	31.0 (-3.0;-9.0)		
M...	Lnw	34.0 (-3.0;-8.0)		
fF...	Ci	33.0 (-4.0;-9.0)	-4.0	81.0
FMM		32.0 (-3.0;-8.0)	-3.0	82.0
	ΔLw			
	ΔCi			
	ΔLin			
	LiA			
	STC			



AlphaCell runs under MS-Windows-7, -8,-10 ; Linux ; Unix ; Mac



AlphaCell is a software product designed and developed by MATELYS-Research Lab

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